



# TOWN OF DUXBURY

DEPARTMENT OF PUBLIC WORKS  
TOWN OFFICES  
878 TREMONT STREET  
DUXBURY, MASSACHUSETTS 02332

5-1-07  
P

THOMAS E. DALEY, P.E.  
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United States Environmental Protection Agency  
Water Technical Unit  
P.O. Box 8127  
Boston, MA 02114

4/25/07

Massachusetts Dept. of Environmental Protection  
Division of Watershed Management  
627 Main Street  
Worcester, MA 01608

Re: Annual NPDES General Permit for MS4's Report  
Permit Number: MA041034/MaDEP Transmittal Number: W114295

To Whom It May Concern:

I hereby am filing the above referenced report on behalf of the Town of Duxbury, MA. This report is structured per the General Permit requirement, Part II F (see attachment "A").

- a) The following is a self-assessment review of compliance with the permit conditions. To assist I have attached the Town of Duxbury's Implementation Schedule (attachment "B") and our Program Summary (attachments "C").

## 1. Public Education

1A. Drainage Posters in Schools and Public Buildings  
Completed in April of 2004 (4/28/04 report).

1B. Stencil Catchbasins  
In the spring and summer of 2006, a Boy Scout came forward and installed markers adjacent to our catchbasins that say "Don't pollute. Flows to Waterways" for his Eagle Scout project. He completed the installation of all of the markers that were purchased (500). See attachments "D", "E" and "F".

1C. Pamphlets in Water Bills  
Completed in October of 2005 (4/27/06 report).

- 1D. Educational Material on Web-Site  
Completed. (4/27/06 report).
- 1E. Educate Community Groups  
The Town of Duxbury Conservation Agent, Joe Grady has participated in and is on the steering committee for the Watershed Action Plan for the south coastal watershed, being funded by the EOEA.

## **2. Public Participation**

- 2A. Stencil Catchbasins  
See 1B. above.
- 2B. Planning Board and Planning Director work on water quality goals  
Every year the Planning Director and Planning Board meet to review the Subdivision Rules & Regulations including stormwater quality issues.
- 2C. Paint Day Collections  
The D.P.W. has hosted Paint Day Collections on every 3<sup>rd</sup> Saturday of the month from April to October, 2006 and have resumed in April of 2007.
- 2D. Open Space & Rec. Committee  
The Open Space & Rec. Committee meet regularly and have currently been working on maintaining open space areas which preserves water quality, maintains watersheds and promotes interest in preserving Duxbury's open space areas. They sponsor Earth Day, trail days and other pertinent events. They are also currently in the middle of updating and rewriting the Duxbury Open Space Plan.
- 2E. Community Preservation Committee  
The CPC meets regularly and has finalized the purchase of an additional agricultural (60 acres) land in the South River Watershed. They are also currently investigating and negotiating with other land owners throughout the Town to obtain significant amounts of additional land.

## **2. Public Participation Extras**

- 2F. Duxbury Bay Management Commission  
Attachments "G" is the 2006 Annual Report for the Duxbury Bay Management Commission. As can be seen in the attachment this group are the "Keepers of the Bay" and are involved in many issues that affect the Bays including water quality.

2G. Fish Ladder Restoration

In 2006 the fish ladder restoration project was completed with the involvement of many townspeople, Boards and Committees. See attachment "G-3" for a more detailed description.

3. **Illicit Discharge Detection and Elimination**

3A. Map Drainage System

Although not due until 2007, the Town has began initial plan preparation with consultants to create a drainage map layer for our GIS system. This work should begin in the summer of 2007. This year the Town also added MassGIS wetland, topography, orthophotos and water bodies to our GIS system.

3B. Coord. with the Div. of Marine Fisheries on Testing Bay Outfalls  
The Conservation Agent continues to coordinate with the Div. of Marine Fisheries to perform annual water quality testing in the Duxbury and Kingston Bays.

3C. Investigate Pollution Hot Spots as needed via Test Results  
The Div. of Marine Fisheries notifies the Board of Health about any potential locations of illicit discharges. This year no new potential locations have been found.

3D. Stencil Catchbasins  
See 1B. above.

3E. Paint Day Collections  
The D.P.W. has hosted Paint Day Collections on every 3<sup>rd</sup> Saturday of the month from April to October, 2006 and have resumed in April of 2007.

4. **Construction Site Runoff Control**

4A. Proposed Zoning Changes re: drainage quality to Town Mtg.  
Completed in March of 2003 (4/28/04 report).

4B. Proposed Conservation Commission Bylaw Changes to Town Mtg.  
Completed in March of 2003 (4/28/04 report).

- 4C. Projects Reviewed by Development Review Team (DRT)  
The DRT meets very regularly and always discusses stormwater issues. A representative is in attendance from each Town Dept.
- 4D. Review and Update Subdivision Rules & Reg.'s re: drainage BMP's.  
Completed in November of 2004 (4/27/05 report).
- 4E. Enforce Approvals by Regulatory Authorities  
Enforcement is an on-going process by all permitting authorities. Checks and balances are in the system such as as-built plans, certificates of compliance, occupancy permits, bonds, etc.

**5. Post Construction Runoff Control**

- 5A. Review BMP Operation Manuals  
It is standard operating procedure for the Conservation Agent and Commission to review applicants Stormwater Operation and Maintenance Plans.
- 5B. DRT review of BMP Operation Manuals  
It is standard operating procedure for the DRT to require and review applicants Stormwater Operation and Maintenance Plans.
- 5C. Maintain BMP's of Projects Accepted by the Town  
As soon as a project (usually a street) is accepted it is added to the street sweeping, catchbasin cleaning, BMP monitoring (typically detention ponds) lists.
- 5D. Require Annual Maintenance / Inspection reports for regulated projects  
It is standard operating procedure for all regulatory authorities to request Maintenance / Inspection reports for regulated projects.
- 5E. Bylaw to Town Meeting  
Currently there is a proposed draft bylaw awaiting Town Meeting action.

**5. Post Construction Runoff Control Extras**

- 5G. Revised Conservation Rules and Regulations  
Completed in March of 2006 (4/27/06 report).
- 5H. Estuaries Project  
Our Conservation Commission with the Mass. DEP and UMASS Dartmouth are exploring the development of TMDL's for nitrogen loadings for the Duxbury, Plymouth and Kingston Bays.

**6. Municipal Good Housekeeping**

6A. & 6B. (beyond NPDES permit requirement) Snug Harbor Drainage  
Completed. (4/27/06 report).

6D. Sweep Streets  
We swept the Town's streets between March and November of 2006. We began sweeping again in March of 2007. There is an on-going as needed sweeping process throughout the year.

6E. Clean Catchbasins  
In the Fall of 2006, the DPW purchased a new catchbasin cleaner to keep up this valuable program. (see attachment "H")

6F. Staff Training  
Completed. (4/27/06 report)

**6. Municipal Good Housekeeping Extras**

6G. Halls Corner Bay Rd. Drainage Project

The Town previously had received a grant from Coastal Zone Management to study outfalls coming from the Bay Rd. area and flowing into the Kingston Bay. The Town contracted with a consultant to track down all of the outfalls and connecting watersheds. As part of this work a drainage map of this area was created.

Also as part of this project an assessment of each outfall was done, the outfalls were prioritized from a polluting standpoint, our Conservation Agent obtained a grant from Coastal Zone Management (\$125,000) and at the time of this writing the DPW has awarded the first phase of a much needed BMP installation project in the Halls Corner / Bay Rd. area which should significantly help the receiving waters of the Kingston Bay. All work is scheduled to be complete by 6/30/07.

6H. Rte 3A Drainage  
The Duxbury DPW and Conservation Commission Agent designed and assisted the MassHighway Dept. this past year with the installation of several BMP's and drainage systems along Rte 3A as part of the MassHighway Dept.'s renovation project for Rte 3A.

6I. Elm St. Drainage  
Currently the Duxbury DPW is in design and permitting for a new drainage system and BMP's for about ½ mile of Elm St. This new system will stop the direct discharge of street runoff into Island Creek.

b) BMP Appropriateness Assessment

We are pleased with the BMP's selected and their results. Street sweeping and catchbasin cleaning are a staple of a good program. Duxbury has had and continues to improve our regulatory authority to ensure no adverse affects on the environment. Duxbury has adopted the CPA and is very proactive at buying and maintaining open space. Duxbury has a very involved and interested group of volunteers on its committees. We also have close relationships with the relevant state authorities. Duxbury has very successful Paint Day, Hazardous Material and Recycling Programs. The public is well educated and open to new ideas. Our increased public education efforts have received positive comments.

c) Progress Towards Measurable Goals Assessment

I think we are making great progress. We continue to put out public awareness messages. Our Paint Day and Hazardous Waste Day Collections are a continued success. The Division of Marine Fisheries continues to test Duxbury Bay. Our DRT continues to support the Local Boards with the regulation of proposed projects.

On a larger note, although I believe Duxbury is making great strides in a short period of time regarding stormwater quality, I think it's important to note the significance of the Town's commitment to actually pursue grants and assist with the actual funding of large drainage improvement projects that in some cases are only needed to improve stormwater quality. I use the items listed in item 6., Municipal Good Housekeeping as the examples. Significant dollars and effort go into the success of these projects. Although the Town only committed to designing and pursuing grants for the Snug Harbor project, the Town actually constructed it along with the additional projects that are highlighted in 6., above. Duxbury is not only willing to regulate others and teach others, the Town itself is willing to step up to the plate and take on large projects for the sake of the environment only.

d) Test Results

None available at the time of this writing.

e) Next Reporting Cycle

Our on-going activities shall remain for the next cycle. We are continuing our land acquisitions for open space. Our largest endeavor will be our drainage mapping that will be also a part of our GIS system. This will be a valuable tool for many years to come.

f) Changes to BMP's and Goals

No changes have been discussed or are proposed at this time.

g) Reliance on Other Entities

The Town relies significantly on the Division of Marine Fisheries & Wildlife for the testing they do in Duxbury Bay. In the last few years we have received two significant grants from Coastal Zone Management to allow us to fund major stormwater mitigation projects.

I hope the above information is informative. Please do not hesitate to call if you have any questions.

Sincerely,



Thomas E. Daley, P.E.  
D.P.W. Director

Cc: Town Manager  
Operations Manager  
Conservation Agent  
Planning Director  
Director of Inspectional Services  
Health Agent

E. Record Keeping

1. All records required by this permit must be kept for a period of at least five years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent.
2. Records need to be submitted only when specifically requested by the permitting authority.
3. The permittee must make the records relating to this permit available to the public, including the storm water management program. The public may view the records during normal business hours. The permittee may charge a reasonable fee for copying requests.


F. Reporting

1. The permittee must submit an annual report. The initial report is due one year from the effective date of this permit and annually thereafter. The reports should contain information regarding activities of the previous calendar year. Reports should be submitted to both EPA and MA DEP at the following addresses:

United States Environmental Protection Agency  
Water Technical Unit  
P.O. Box 8127  
Boston, MA 02114

and

Massachusetts Department of Environmental Protection  
Division of Watershed Management  
627 Main Street  
Worcester, Massachusetts 01608

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2. The following information must be contained in the annual report:

- (a) A self assessment review of compliance with the permit conditions.
- (b) An assessment of the appropriateness of the selected BMPs.
- (c) An assessment of the progress towards achieving the measurable goals.
- (d) A summary of results of any information that has been collected and analyzed. This includes any type of data.
- (e) A discussion of activities for the next reporting cycle.
- (f) A discussion of any changes in identified BMPs or measurable goals.
- (g) Reference any reliance on another entity for achieving any measurable goal.



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Watershed Management

BRP WM 08A NPDES Stormwater General Permit Notice of Intent

for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

F. Example Storm Water Management Program TIME FRAMES

Transmittal Number 114295

Facility ID (if known)

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BMP ID #	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE				Next Permit
	Spring 03	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08	
1A			X																		
1B					X																
1C									X												
1D											X										
1E		X				X				X				X				X			
2A					X																
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